

Patent Abstracts of Japan

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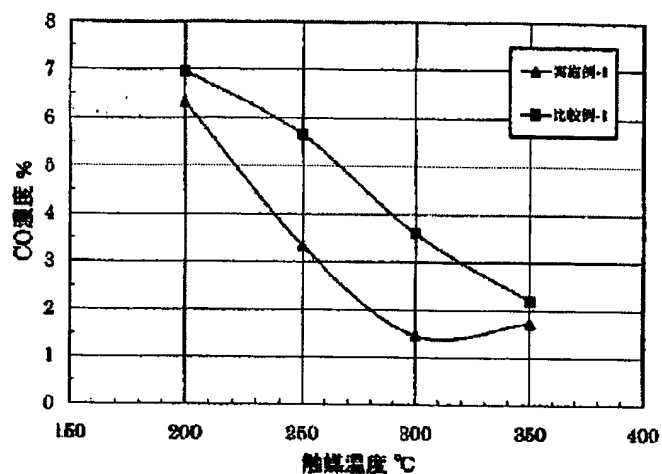
APPLICATION DATE : 05-03-02
APPLICATION NUMBER : 2002059224

APPLICANT : NE CHEMCAT CORP;

INVENTOR : KAJI HIROYUKI;

INT.CL. : B01J 23/656 C01B 3/16 C01B 3/48

TITLE : CATALYST FOR REMOVING CARBON MONOXIDE IN HYDROGEN GAS



ABSTRACT : PROBLEM TO BE SOLVED: To obtain a catalyst for removing CO having an effect to suppress a methanation reaction in which catalyst activity is high when used to remove CO contained in a hydrogen rich gas, such as a reformed gas, by converting to CO₂ by the reaction of a water gas shift, and in which the CO is converted to CH₄ in a high temperature region.

SOLUTION: This catalyst for removing carbon monoxide in the hydrogen rich gas is characterized in that platinum and/or platinum oxide and rhenium and/or rhenium oxide are supported on a carrier comprising titania or a metal oxide containing the titania.

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CPY - NECH-N

DC - E36 J01 J04 L03 X16

DR - 1423-U 1521-S 1521-U 1532-P 1532-U 1544-S 1544-U 1966-S 1966-U

FS - CPI;EPI

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MC - E11-Q01 E11-Q02 E31-A02 E31-N05B J01-E03F J04-E04 L03-E04A2 N01-C02
N02-F N03-B01 N03-B02 N03-E

- X16-C01C X16-C15 X16-C17

M3 - [01] A422 C810 M411 M730 M904 M905 N163 Q421 Q431 Q436 Q439 Q508;
R10714-K R10714-C

- [02] A422 A940 C108 C550 C730 C801 C802 C803 C804 C805 C807 M411 M730
M904 M905 M910 N163 Q421 Q431 Q436 Q439 Q508; R01966-K R01966-C;
1966-S 1966-U

- [03] A678 C810 M411 M730 M904 M905 N163 Q421 Q431 Q436 Q439 Q508;
R03247-K R03247-C

- [04] A675 C810 M411 M730 M904 M905 N163 Q421 Q431 Q436 Q439 Q508;
R07076-K R07076-C

- [05] A313 A940 C108 C550 C730 C801 C802 C803 C804 C805 C807 M411 M730
M904 M905 M910 N163 Q421 Q431 Q436 Q439 Q508; R01544-K R01544-C;
1544-S 1544-U

- [06] A540 A940 C108 C550 C730 C801 C802 C803 C804 C805 C807 M411 M730
M904 M905 M910 N163 Q421 Q431 Q436 Q439 Q508; R01521-K R01521-C
RA00R2-K RA00R2-C RA2VTE-K RA2VTE-C; 1521-S 1521-U

- [07] A678 A940 C108 C550 C730 C801 C802 C803 C804 C805 C807 M411 M730
M904 M905 N163 Q421 Q431 Q436 Q439 Q508; RA022Y-K RA022Y-C

- [08] A675 A940 C108 C550 C730 C801 C802 C803 C804 C805 C807 M411 M730
M904 M905 N163 Q421 Q431 Q436 Q439 Q508; RA3ZCU-K RA3ZCU-C

- [09] C106 C108 C550 C730 C800 C801 C802 C803 C805 C807 M411 M750 M904
M905 M910 N163 Q431 Q436 Q439 R013; R01423-K R01423-X; 1423-U

- [10] C101 C550 C810 M411 M720 M904 M905 N104 N163 N441 Q413 Q431 Q436
Q439 Q454 R013; R01532-K R01532-P; 1532-P 1532-U

PA - (NECH-N) NE CHEMCAT KK

PN - JP2003251181 A 20030909 DW200376 B01J23/656 006pp

PR - JP20020059224 20020305

XA - C2003-224200

XIC - B01J-023/656 ; C01B-003/16 ; C01B-003/48

XP - N2003-647898

AB - JP2003251181 NOVELTY - The catalyst coated on the carrier, consists of
titanium or titanium oxide, platinum or platinum oxide, rhenium or
rhenium oxide, alumina and zirconia.

- USE - For removing carbon monoxide in hydrogen gas for solid polymer
fuel cell.

- ADVANTAGE - The catalyst is reliably maintained in activated
temperature, while converting carbon monoxide into methane.

- DESCRIPTION OF DRAWING(S) - The figure shows a graph which explains
removal percentage of carbon monoxide with respect to temperature.
(Drawing includes non-English language text).

- (Dwg.1/4)

CN - R10714-K R10714-C R01966-K R01966-C R03247-K R03247-C R07076-K
R07076-C R01544-K R01544-C R01521-K R01521-C RA00R2-K RA00R2-C
RA2VTE-K RA2VTE-C RA022Y-K RA022Y-C RA3ZCU-K RA3ZCU-C R01423-K
R01423-X R01532-K R01532-P

DRL - 1966-S 1966-U 1544-S 1544-U 1521-S 1521-U 1423-U 1532-P 1532-U

(C) WPI/Derwent

IW - CATALYST REMOVE CARBON HYDROGEN GAS SOLID POLYMER FUEL CELL TITANIUM
TITANIUM OXIDE PLATINUM PLATINUM OXIDE RHENIUM RHENIUM OXIDE ALUMINA
ZIRCONIA

IKW - CATALYST REMOVE CARBON HYDROGEN GAS SOLID POLYMER FUEL CELL TITANIUM

TITANIUM OXIDE PLATINUM PLATINUM OXIDE RHENIUM RHENIUM OXIDE ALUMINA
ZIRCONIA

NC - 001

OPD - 2002-03-05

ORD - 2003-09-09

PAW - (NECH-N) NE CHEMCAT KK

TI - Catalyst for removing carbon monoxide in hydrogen gas for solid
polymer fuel cell, has titanium or titanium oxide, platinum or
platinum oxide, rhenium or rhenium oxide, alumina and zirconia